

cause one to modify the cards so as to make them three dimensional cubes.

5 The Midgley invention in figs. 6 and 7 is a wall chart and functions as a wall chart. There is no motivation in that patent to suggest that modifying the cards that go on the wall chart to make them cubes would make the wall chart function in a better or more desirable way.

10 Substituting a cube, instead of a card, on the wall chart would not render the wall chart any more useful to the student. Since there is no mechanism in the wall chart to turn the cubes, there would no more information transmitted to the student by cubes than by cards. Without a mechanism to
15 turn the cubes, the student would still only see one face of each cube a result that would not make the proposed modified invention any more desirable or preferable over the original wall chart.

20 Thus, there is no legal reason to suggest that the proposed modification would make the modified wall chart of Midgely preferable or desirable, based upon the teachings of Midgely.

On the contrary, modifying the shape of the cards would
25 violate the teachings of the wall chart invention. Such a change would simply increase the costs of producing such an invention without any attending advantages. Since there is no provision in the wall chart of Midgley that would allow the cubic shapes to be rotated or inverted in order to reveal all
30 the faces of the cubes, such a change would simply be a waste of effort.

There is no mechanism in the wall chart that would allow the cube faces to be rotated. That being the case, such a
35 modification as proposed by the examiner would contradict the express teachings of that invention and such an

interpretation is illegal under the appropriate patent laws and case laws.

Moreover, such a modification as proposed by the examiner
5 would render the modified device inoperable, there being no mechanical means for the wall chart of fig. 6 of Midgley to hold the cubes that the examiner is suggesting onto the wall chart. Such cubes would simply fall off the wall chart. Such a result is not surprising since the wall chart of Midgley is
10 simply designed to hold cards and not cubes.

Such an obviousness rejection is incorrect at law, because the proposed modification would render the underlying invention in operable.

15

In the specs:

Amend the specification to reflect the following:

- 20 On page 5, line 29; after "board" insert --2--;
On page 5, line 29; after "cubes" insert --4--;
On page 6, line 3; after "left" insert --5--;
On page 6, line 3; after "right" insert --6--;
On page 6, line 7; after "edge" insert --7--;
25 On page 6, line 8; after "edge" insert --9--;
On page 6, line 11; after "array" insert --11--;
On page 6, line 17; after "array" insert --13--;
On page 6, line 22, after "atomic name" insert --15--;
On page 6, line 24; after "configuration" insert --16--;
30 On page 7, line 6; after "symbol" insert --17--;
On page 7, line 14, after "cube" insert --(18-20)--.

In the claims:

- 35 Cancel previous claims and add the following:

5. A two part teaching puzzle apparatus based upon the periodic chart of chemical elements that provides an array of rows and columns of said chemical elements; where the location of each element in the array is based upon its chemical properties, the apparatus comprising: a first part puzzle board having a top edge, a bottom edge and two side edges, said edges having an outline shape reflective of said periodic chart, a second part comprising a plurality of cubic shaped pieces, each piece having six faces, each of said pieces corresponding to a chemical element in the periodic table and having information on at least one of said faces of said cubic shape pertaining to the chemical name of a given said element, said puzzle board having shape for accommodating an array of said cubes that reflects the configuration of said periodic chart.

6. The apparatus of claim 5 wherein said puzzle board comprises a main section having left and right side edges and top and bottom edges, said main section having a shape for accommodating a 3 x 18 array of said cubic shaped pieces, and a first upper section in connection with said top edge of said main section, said upper section having a left edge that is co-linear with said left side edge, said first upper section having a shape for accommodating a 2 x 2 array of said cubic shaped pieces, and a second upper section in connection with said top edge of said main section, said second upper section in connection with said top edge of said main section and having a right edge that is co-linear with said right edge of said main section, said second upper section having a shape for accommodating a 2 x 6 array of said cubic shaped pieces.

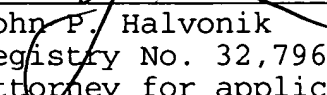
7. The apparatus of claim 6 wherein each of said cubes contains information pertaining to a chemical symbol of one of said chemical elements.

8. The apparatus of claim 7 wherein each of said cubes contains information pertaining to an electronic configuration of one of said chemical elements.

5 The invention is now in condition for allowance and we respectfully request that letters patent be granted.

Respectfully submitted,

10



John P. Halvonik
Registry No. 32,796
Attorney for applicant

15

Law Offices of John P. Halvonik
15200 Shady Grove Rd.
Suite 202
Gaithersburg, MD. 20850
20 (301) 990-9393

